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AN
INTRODUCTION
TO
CAPITALISM:

FOUR LECTURES ON
MARXIAN ECONOMICS

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Published by: RADICAL AMERICA
1878 Massachusetts Ave.
Cambridge, Mass. 02140



LECTURE ONE: HOW DO YOU LOOK AT THE WORLD?

Theory

I saw a machine once that slices vegetables. You put in a whole tomato and out come slices of tomato. You put in an onion and out come slices of onion. What comes out, of course, is determined by what gets put in. If you want chopped onions you can get them by changing the insides of the machine. You can get chopped onions, diced beets, sliced tomatoes, shredded lettuce, french-fry potatoes and a whole lot of other things. What comes out of course, depends upon what you put in and the way you have the machine set up.

I propose that that is a useful way of looking at economic theory. Or any other kind of theorizing you may want to do. The onions and tomatoes are the assumptions on which a theory is built and the machine and its parts are the relations which you specify about the way things behave. What you get out depends upon what you put in and what you specify.

Now for lots of purposes the results may be the most important thing. You chop vegetables to make a meal, for instance. Or you have a theory that tells you there is a 9th planet in the solar system and that's a fairly important result. Or you have a theory that tells you capitalism cannot survive. So I guess I understand why people tend to concentrate on the results or "predictions" which Karl Marx got out of his economic theory. They certainly are important, interesting results.

And yet just like the chopped onions, they depend

on two other things, the assumptions, and the machine itself. Now I don't want to leave the impression that you're completely free to select any old assumptions you want. If you put rocks in the machine you get some pretty strange results. And if you aren't careful and honest about what you assume, you get some pretty strange results, too.

Karl Marx's assumptions were based on the 19th century economy. So when Marx assumed price competition among capitalists it was because at that time capitalists actually did compete by lowering prices. His assumptions were honest in that they were drawn from real practice and they were carefully selected to isolate what to him were the most important features of the economy. And of course they affected his results. So that when people try to understand Marxian economics by looking only at the results you get this kind of a statement from a well-known economist:

The Marxian predictions both of inevitably increasing immiseration of the masses and of increasing concentration of wealth under capitalism have been proved completely wrong by American experience.

Now that's a fairly standard thing to say about the Marxian results and let's just leave aside whether it's a true statement or not. That is, for example, whether the Vietnamese would agree with it. Let's use this quote from Shulamith Firestone's The Dialectic of Sex to summarize and emphasize that it is the method which is vital.

In creating such an analysis we can learn a lot from Marx and Engels: Not their literal opinions about women - about the condition of women as an oppressed class they know next to

nothing, recognizing it only where it overlaps with economics - but rather their analytic method.

On History

First, Marx was convinced that there were (are) great principles or forces or natural laws which assert themselves through all of history, more or less strongly, as other conditions alter. He believed they could be used to analyze social relations, just as the law of gravity can be used to analyze natural relations.

One of these principles is that of incessant class struggle - "The history of all hitherto existing society is the history of class struggles." Now just as the law of gravity can be overcome or negated by airplane and rocket engines, but continue to exert its force in the natural world - so too can class struggle be blunted or obscured by religion, nationalism, or great personalities, yet it continues to exist and to assert its power.

So if you want to comprehend history, including current history, it is well to begin by asking how will this or that action or proposed action affect class interests. But, of course, to do so we need to know how classes are determined.

For Marx the answer was obvious: Classes are determined by their relation to the means of production. To understand this we need to pick up another historical thread or natural law or social necessity. Which is that in every epoch, communities of man cannot escape the need to work and thus to allocate the supply of labor power and thus the product of their work. Different societies handle this social necessity in different ways. Some tribes let the strongest, wisest or best magicians avoid work. Feudal society

began when someone organized an army and someone else organized a hell to frighten people into working for them. It ended when someone else got the idea of private ownership of the means of production.

Thus, the division of society into classes based on military strength, mysticism and birth which accomplished the labor allocation directly was replaced by a society in which social class depended upon property ownership or upon control of the means of production. A society which allocated labor directly in the form, say, of working 3 days for the lord, 3 for yourself, and 1 for the Lord, was replaced by a society which accomplished this indirectly, through commodity exchange and wage labor. But although the scenario changed the plot stayed the same. Some people worked for others and others were worked for. All capitalism did was make this basic fact very hard to see. Thus, I'm frequently told (by workers) that if there were no capitalists, there would be no jobs for it is the job of the capitalist to provide jobs. Which is pretty much what I've been saying -- it's the role of the capitalist to be worked for.

Of course the above is almost criminally simplified. One important complication which must be made is the recognition of the fact that although there are two primary classes, the workers and the owners, there are lots of other subsidiary groupings which form different alliances on each issue. This causes serious students lots of trouble. Notice that I said two primary classes not just two. In analyzing France under the Presidency of Louis Bonaparte, Marx speaks of workers, capitalists, bourgeoisie, petit-bourgeoisie, proletariat, lumpen-proletariat, middle-classes, landlords and peasants.

Now I will take up a more troublesome point. We must define class on the basis of control of

property. Let me repeat, the control, not ownership, of property. Marx always insisted that we not "make the individual responsible for relations whose creature he socially remains." He never blamed capitalists for acting as they did, for they were, after all, only the agents of the capital relation. As C.L.R. James wrote in State Capitalism and World Revolution, "it was Marx's contention that the existence of a labouring force compelled to sell its labour-power in order to live meant automatically the system of capitalist accumulation. The capitalist was merely the agent of capital. The bureaucrats are the same."

In the U. S. there has been an extended debate over "people's capitalism" by which is meant that stock ownership is divorced from economic control. On my definition of class this debate can be seen as sterile. Control is the key, whether that control takes the form of private property ownership or not.

As long as workers (or students) are faced with the objective reality of control by the agents of capital, whether those agents are called capitalists, managers, chancellors, or shop stewards, Marx's analysis applies. The question of class is thus independent of the fact of ownership. It follows that the workers will have made available to them a wide variety of consumer goods as the bureaucrats strive harder and more imaginatively to divert attention from the sphere of production to that of consumption. The menu will offer color TV and other private daddies; medicare and other public programs, but it will be silent on the question of production. For the production problem is the split between those who act but do not control and those who control. That is also the class question in the U. S. This problem has no solution but the seizure of power by all the people.

Summarizing so far, we have said that history must be made an integral part of your world-outlook, that it must be class history, and that the class lines must be drawn according to the production relation, which, for our epoch, turns on the control of the creative activity of the masses.

On Materialism

Earlier I mentioned that Marx drew from history, i.e., from reality, the basic forces and trends which I just discussed. That is, he looked at history first, then formed ideas about history, then looked again to see if his ideas could predict events either in the past, present or future. Only if they could were they good or correct ideas or principles. He opposed this to what he felt Hegel had done -- first forming the idea and then imposing it upon reality. But let's use the words of a review of Kapital which Marx himself admired.

Marx treats the social movement as a process of natural history, governed by laws not only independent of human will, consciousness and intelligence, but rather, on the contrary, determining that will, consciousness and intelligence If in the history of civilization the conscious element plays a part so subordinate, then it is self-evident that a critical inquiry whose subject-matter is civilization, can, less than anything else, have for its basis any form of, or any result of, consciousness. That is to say, that not the idea, but the material phenomenon alone can serve as its starting-point. Such an inquiry will confine itself to the confrontation and the comparison of a fact, not with ideas, but with another fact.

Now, that quote overdoes the importance of things and underplays ideas correspondingly but it gives you a good idea of their relative importance. Mao's important essay, "On Practice," talks about the interactions between things and ideas so I'm not trying to set them up as mutually exclusive. What they are is mutually reinforcing. And it's not even true that ideas are the least important part of the pair. Marx said that under some conditions ideas could become material forces. This means that certain ideas propel people into the kind of actions which make history.

Unity of Opposites

Which leads us to the dialectics of historical dialectical materialism. Dialectical thinking is opposed to mechanical thinking, even (or especially) mechanical materialism. The process itself was probably first enunciated in its modern form by Hegel but because his dialectics flowed from the ideal to the real, i.e., were not materialist, Marx said that he had stood the dialectics on its head.

We proceed from the understanding that all things and concepts contain not only themselves but their opposites as well. This often shows up as a contradiction between form and substance. Thus, under capitalism, production is a social activity which has the form of private ownership.

Moreover, contradiction within a thing is the fundamental cause of its development. That is, changes in society are due primarily to internal contradictions in society. Marx wrote that each stage of society contains within it its "seeds of destruction." That capitalism succeeded feudalism and that socialism will succeed capitalism is Marx's most widely known result. It is based, in part, on historical evidence that capital, commodity markets, labor specialization and so forth existed for several thousand years before becoming strong enough and per-

vasive enough to destroy feudal society. Moreover, many of the vestiges of feudalism remain in capitalist society. Thus capitalism itself existed as a tiny seed in feudal society. It grew larger and stronger until it overshadowed and conquered feudalism, which then became the minor partner in this unity of opposites. Further, socialism itself exists now; in embryo, in the creative self-activity of the masses within capitalism.

But that is a result of the method, not just an example of the method. Marx arrived at this generality not through some sort of mystical ability to foresee the future but through a concrete application of the principle of unity of opposites to concrete economic relationships. He began Kapital with a complete examination of the simplest and most pervasive object in capitalism: The commodity. In it he discovered most of the contradictions in society. When he rediscovered each of them at a later more complex stage of analysis they reconfirmed his initial analysis in some cases and forced him to alter some tentative conclusions in others.

A trivial example: Look at the clock; it is now 12:49 (or whatever) -- that is a fact. Yet it is a fact that contains within itself the seed of its own destruction. 12:49 contains within itself, as an integral part, its opposite "not-12:49." And surely, inexorably "not-12:49" is asserting its strength and will simply have a new fact, i.e., "not-12:49" which contains within itself, as an integral part, as a unity, its opposite, "not-not-12:49." Does "not-not-12:49" represent a return to the original reality of "12:49?" No- this new fact incorporates within itself the old fact, but it is enriched by the experience of all preceding dialectical development. People who engage in struggle emerge from that struggle different from when they began.

There are other examples. Can you think of life without death? Or death without life? Positive without negative electrical impulses? An atom without centrifugal and centripetal forces? These examples may have erred on the side of being overly mechanical and drawn primarily from the physical sciences, so let me try to straighten that out. The main way in which the dialectic operates in the human sphere is through the fact that people by their self-action change the material base of society and themselves are changed in the process, thus many practices simply can't continue. Perhaps the most striking example of this process took part in the U. S. in the first half of the 19th century when black women and men (read about Harriet Tubman) simply refused to stop running away from the South and slavery and later organized fighting groups and work stoppages that meant the slave economy could not continue.

It will be useful at this point to borrow a summary of the dialectical process from C. L. R. James.

Let me sum up in terms which you should study and work at until they are an instinctive part of your outlook and method of thought:

- a) All development takes place as a result of self-movement, not organization or direction by external forces.
- b) Self-movement springs from and is the overcoming of antagonisms within an organism, not the struggle against external foes.
- c) It is not the world of nature that confronts man as an alien power to be overcome. It is the alien power that he him-

self has created. (Capital)

- d) The end towards which mankind is inexorably developing by the constant overcoming of internal antagonisms is not the enjoyment, ownership, or use of goods, but self-realization, creativity. (Men are not pigs to be fattened.)

But enough of this. I have tried to give an answer to the question, "How do you look at the world?". The answer I gave was based upon the answer to another hidden question. "What is your motive in looking at the world at all?" It is clear that if you want to change the world you will look at it differently than if you want to preserve it. As a Marxist, I echo his phrase, "The point is not to know the world but to change it." But that thought is based firmly on the idea which Tim Leary sent from underground, "Listen Americans, your government is an instrument of total, lethal evil!"

If you seek to change the world you must first understand it, it is true. But the understanding must be done in terms of seeking out the forces which make change. To date, historical, dialectical materialism is the best tool I know of for such an analysis.

LECTURE TWO: THE SIMPLE MARXIST MODEL: AT REST

Why Bother?

Murray Bookchin, in his fine essay, "Listen, Marxist!" says,

The attempts of the cretins who follow in Marx's wake to keep the system alive with a patchwork of emendations, exegesis, and above all, a halfass "scholarship" are degrading insults to Marx's name and a disgusting pollution of everything he stood for.

Those are strong words, but, I think, not too strong to describe the foolishness of people who mindlessly intone Marx's categories and phraseology and chant a litany of his results. These people are not unique to our time, their simplistic prattling drove Marx himself to say, over and over, "All I know is, I am not a Marxist."

What is the source of this fetishism of Marxian concepts? Well, in addition to religious needs, I think that the primary culprit is our own mental laziness. We want, above all, to avoid the hard work of digging through Marx to see what he said, to search out the weaknesses and the incomplete or erroneous sections, which requires a thorough understanding of the whole. So I've prepared a summary of some of what I understand Marx to have said about economics. It's a pretty good summary, if for no other reason than that it's the only one I know of which preserves any flavor of the dialectic. Nonetheless, it is only a summary and by itself can only indicate to you the power of the dialectic. There is no substitute for

serious study.

Bookchin makes another point in his essay. He asks, "When the hell are we finally going to create a movement that looks to the future instead of to the past?" A good question, and I think I have a good answer. When we learn to see the future as an extension of the past, and take the trouble to understand that past. Not a minute before!

Today we will consider only a part of the formal economic theory developed by Karl Marx. I call this "The Simple Marxist Model: At Rest." "Simple Model" means that we will be developing and defining terms, concepts, and relationships. "At Rest" means that to begin with we leave out accumulation. I shall try to prevent this from being overly technical and will probably thereby fall into the trap of insulting your intelligence. Please understand that I do so without malice.

Exchange

Consider a society which produces these commodities:

3 coats
5 apples
1 car

Now by commodity production, we mean goods that are produced to be exchanged -- a product is not a "commodity" if it is used by those who made it. So if you make 10 candles, sell 8 of them, and use 2 of them, the 2 you use are not "commodities." Since commodities must be exchanged, a very important question is: "What are the exchange rates?"

We could discover these rates if we knew the prices. Thus if:

the price of 1 coat is \$100,
the price of 1 apple is 10¢
and the price of 1 car is \$2000,

a little arithmetic will convince us that the rates of exchange are such that

$$1 \text{ car} = 20 \text{ coats} = 20,000 \text{ apples.}$$

What does it mean for us to say that

$$\begin{aligned} 1 \text{ car} &= 20 \text{ coats}, \\ \text{or } 1 \text{ coat} &= 1,000 \text{ apples}, \\ \text{or } 1 \text{ apple} &= \frac{1}{20,000} \text{ th car?} \end{aligned}$$

It might mean that they weigh the same amount, or it might mean that they have any number of other characteristics in common, color, size, etc. It is easy enough to check on whether this is what is meant, and let's say we have done so and found that none of these things is true.

Nobody who has lived very long in a capitalist system will be surprised to learn that what in fact is meant by our equation is that each of these commodities in these proportions represent equal quantities of exchange value (money).

The Labor Theory of Value

Without appearing either very precise or very profound, we have already discovered a very important principle which most modern economists ignore. That is, if we can equate two things they must already possess equality both quantitatively and qualitatively. If the latter is true we mean only that they share the same quality, say that they all are red.

Marx quotes Aristotle, and I want to be very

careful to get this right, "Exchange cannot take place without equality, and equality not without commensurability. It is, however, in reality, impossible that such unlike things (as beds and a house) can be commensurable." Now Marx adds, "i.e., qualitatively equal." He goes on, "Aristotle therefore, himself, tells us, what barred the way to his further analysis; it was the absence of any concept of value. What is that equal something, that common substance, which admits of the value of the beds being expressed by a house?"

To restate, to be equated quantitatively things must possess a common quality. In the case of commodities that quality is that they are all the products of the labor process. This is the essence of the labor theory of value: that commodities can only be compared, equated and exchanged because they have the common quality of having been produced by labor!

Let's return to the prices that we assigned to the commodities. Where do they come from? The facile answer is that they are determined in a market by the forces of Supply and Demand. This answer is at about the same level of intelligence and validity as answering the question: "Why must people die in wars?" with, "because a bullet or other missile strikes them in a vulnerable place."

"Demand" and "supply" and "the market" are, of course, abstractions that do not exist and so cannot determine anything. Marx says, "The name of a thing is something distinct from the qualities of the thing. I know nothing of a man by knowing that his name is Jacob." We must look behind these sterile categories to see what forces are at work in the creation of exchange equality.

The prices when multiplied by the quantity of each commodity in our equation produce:

$$\begin{array}{ll} \$2,000 \times 1 \text{ car} & = \$2000 \\ 10\text{¢} \times 20,000 \text{ apples} & = \$2000 \\ \$100 \times 20 \text{ coats} & = \$2000 \end{array}$$

that is, 20 coats have the same dollar value as 1 car or 20,000 apples. Why should this be so? Remember we have just rejected market prices as being too facile an explanation. Remember also that each of these equalities has two aspects -- a qualitative one and a quantitative one. Although the quantitative aspect is dominant we know that it cannot exist without a qualitative aspect. That is, we can never express a quantitative relationship between two things which do not already possess a qualitative relationship. You encountered this problem earlier when (in high school algebra) you tried to add 2 oranges and 3 apples and could only get 5 pieces of fruit as a meaningful result.

So if we want to add our commodities we get:

$$\begin{array}{ll} 3 \text{ coats} & = \$300 \\ 5 \text{ apples} & = 50\text{¢} \\ 1 \text{ car} & = \$2000 \\ (\text{national product}) & = \$2,300.50 \end{array}$$

But those prices presume a qualitative relationship which is that they all represent embodied physical labor in their production. And the quantitative relationship which we observe in the form of prices is in fact the ratio of labor time spent in their production. In Marx' words, "Price is the money name of the labour realized in a commodity."

Behind the prices we are dealing with lies a labor relationship like:

$$\begin{array}{ll} 1 \text{ apple} \text{ (requires)} & 1 \text{ minute of labor} \\ 1 \text{ coat} \text{ (requires)} & 1000 \text{ minutes of labor} = \\ & 16 \text{ hrs. } 40 \text{ min.} \end{array}$$

1 car (requires) 20,000 minutes of labor =
333 hrs. 20 min.

Let's restate: the reason we can express quantities of commodities as quantities of dollar value is that they already possess a common quality. This is true independently of what that common quality is. We are (following Marx) isolating the common quality that each incorporated physical human labor in its production process.

On the Naivete of Karl Marx

Even people who know nothing of Marx associate the phrase "labor theory of value" with his name. A professor I know tells his class that Marx used the labor theory of value only to get the workers on his side. Some self-styled "Marxists" turn the theory into a new religion with the downtrodden laborer as Son of God. An understanding of just why Marx used it and what worth it retains is in order.

Many bourgeois economists make a big thing out of showing logical inconsistencies in the theory. For the most part the weaknesses that they point to are real enough, yet they reflect a curious double standard. For instance, in order to make the ratio of embodied labor in two commodities equal to their price ratio, we must make a number of restrictive assumptions. Non-Marxists are quick to argue that these assumptions are unreal and that therefore the theory is "wrong." However, in their normal routine of study, they are forced, by the same type of logical inconsistencies, to make assumptions that are at least as artificial as those Marx made. These they explain away as being "useful abstractions." Up to now

away as being "useful abstractions." Up to now they have been able to eat their cake and have it too. If

neoclassical economics is "right," then so is the labor theory of value! They can't continue to have it both ways.

In particular, economists say that labor is only one "factor of production," that land and capital both contribute to the quantity of goods which labor turns out. The frequency with which this appears is probably an index of the contempt in which Marx is held and an inverse measure of how often he is read. To imagine that an outstanding thinker like Marx would overlook such obvious realities as that an hour of labor is more productive with tools on rich land, than without tools on poor land is to announce to the world the depth of your ignorance.

We will get further by crediting Marx with the fact that he had thought this matter through. He tells us that he rejected land as a standard of value because of its non-homogeneity. Of course, labor is not uniform either, but acres are less alike in productive capacity than man-hours of labor power. Moreover, they are not, or were not in Marx' life, capable of being made more alike. An acre in the midst of the Sahara is not easily convertible to higher productivity. Labor, on the other hand, as a social labor force is malleable and trainable. Sweezy tells us that, "Capitalist society is characterized by a degree of labor mobility much greater than prevailed in any previous society. Not only do workers change their job frequently but new workers are quickly diverted from declining to rising occupations." Indeed, this fact has been called "the essence of capitalism." So in comparing land and labor as candidates for standard of value we see that labor has three advantages,

- 1) it is less dissimilar
- 2) it is more malleable
- 3) it reflects an essential fact of

commodity production.

Capital is more easily disposed of. We cannot use capital goods as a standard of value of commodities for the simple reason that capital goods are themselves commodities.

In the light of the above discussion, there is no justification for those "Marxists" who run around chanting, "Labor produces all wealth." Marx wrote, "A Critique of the Gotha Programme" in part to respond to a group of self-styled Socialists who had made just this claim. He says, "Labor is not the source of all wealth. Nature is just as much the source of use values as labor, which itself is only the manifestation of a force of nature, human labour power."

Prices and Value

We have also said that the prices will be in the same ratio as the quantity of labor power embodied in each commodity. Let's see why this may be true.

If two workers each spend one hour in the production of 6 dozen oatmeal cookies then each dozen will have twenty minutes embodied labor power, provided that a number of prior conditions are met. The labor spent must be equal to the social average. If our workers take twice as long as the average oatmeal cookie maker only 10 minutes will count and they will have wasted, between them, in the production of 6 dozen cookies, 1 hour. Also the labor must be socially necessary, that is, be useful. If they confuse one of the ingredients and produce inedible chunks of something-or-other they will have wasted the entire 2 hours. So the labor time we count must be average labor and must be socially necessary.

If, due to some change in conditions it takes longer to produce the commodity, its value increases.

If the workers improve the value falls.

Now what is the value of a dozen oatmeal cookies? The answer is not twenty minutes. The answer is that we cannot yet say. Value can only be expressed relatively, not absolutely. Labor creates value but is not value itself. We need another commodity, say hash pipes, which also embody a given average quantity of socially necessary labor time. If one hash pipe embodies 60 minutes of labor then the value of one dozen oatmeal cookies is 1/3 hash pipe, or the value of 1 hash pipe is 3 dozen oatmeal cookies. My economist fellow-travelers will recognize here the principle of opportunity cost. That is, the real value (or cost) of something is what we must give up in order to have it.

In the equation

$$1 \text{ dozen cookies} = 1/3 \text{ pipe}$$

we are saying that the cost to society of cookies is that it must get by with fewer pipes.

Marx calls the cookies the relative form and the pipe the equivalent form of value. Of course, there is nothing sacred about this; if we write 1 pipe = 3 dozen cookies we have transformed pipes into the relative form and cookies into the equivalent form. Marx says that money is the universal equivalent.

Now, since the labor embodied in these commodities is in the ratio 3 to 1, that is, the amount of time spent on each pipe is 3 times that spent on each dozen cookies, the price will be in the same ratio. If cookies cost \$1.00, pipes will cost \$3.00; if cookies cost 66¢, pipes will cost \$1.98.

There are several things which might keep this

from happening. One is non-constant costs and another is differing capital labor ratios. By non-constant costs I mean that the amount of time per pipe depends on the total number of pipes you make. If you can make 1 pipe in 60 minutes, 2 pipes in 100 minutes, 3 pipes in 130 minutes, etc., while each dozen cookies requires 20 minutes, the cost of cookies in terms of pipes given up clearly depends on how many pipes you make.

By differing capital-labor ratios I mean that 1 type of commodity requires more capital and less labor relative to other commodities. The point is that price ratios and labor ratios will be the same only in unusual circumstances. However, we can learn something about commodity production by treating them as equal.

Surplus Value

Capitalists as such, don't work, that is, don't provide any socially necessary labor. This is just a matter of definition, so that if we see a man who owns a farm, owns some farm machinery, hires workers and works himself we should think of him as part worker, part land owner and part capitalist. We are concerned only with people as abstractions, as economic categories. That is we are concerned only with their essence. Now since capitalists, as capitalists, don't work, don't labor, don't add anything to the store of value of society, how is it that they receive, as capitalists, an income, a portion of societies' value product? Marx found the answer to this question in the concept of surplus value.

He says that the general form of capital is M-C-M. That is, the capitalist's role in exchange is to use his money to buy commodities and sell them in such a way as to end up with M' M, i.e., with more money at the end than at the start. How is this possible?

Well, most of us are fairly aware of ways in which this happens all the time. Drug companies, for example, set the prices of drugs outside the U. S. at a fraction of the price for identical items within the U. S.

Most prices in most stores reflect the same willingness to sock it to you. As a result of this element in our lives we are all going to be a little surprised to hear what Marx had to say:

It is true, commodities may be sold at prices deviating from their values, but these deviations are to be considered as infractions of the laws of the exchange of commodities . . .

The creation of surplus-value, and therefore the conversion of money into capital, can consequently be explained neither on the assumption that commodities are sold above their value, nor that they are bought below their value

It is impossible, by circulation alone, to account for the conversion of money into capital, for the formation of surplus-value . . .

Marx says very clearly that you can't account for surplus-value, i.e., capitalists' income, by looking at their ability to set prices too highly, that is, their monopoly power. This merely transfers, does not create, any value. Person A's gain is exactly offset by person B's loss. Let's look again. M-C-M' is the general form of capital in the sense that it describes not only industrial capital but also merchant and financial capital. Yet because of the competitive behavior of all capitalists no capitalist was able to sell any commodity above its value. To explain the source of profit Marx had to look to the production process directly.

Let me say that while Marx was justified in this approach by the actual conditions of the 19th century, present day Marxists are not so justified. Conditions have changed. The fact that they have ignored merchant and financial capital to concentrate on production capital has meant that they have stressed the importance of the "exploited worker" while ignoring the "exploited consumer" and the "exploited debtor." This is probably one of the worst examples of creating a fetish, or worshipping the words of Karl Marx.

For now, however, let's return to our 19th century capitalist and watch him discover, in the production process itself, a source of profit. The value of a commodity is represented as,

$$Z = c + v + s$$

where Z represents total value, c is constant capital, v is variable capital and s is surplus value.

Making candles takes, let us say, 1 hour of average, socially necessary labor time directly. It also takes 1 hour of indirect labor, by which I mean the labor embodied in the previous production of wicks, parafin, molds, dyes, etc. Marx calls the indirect labor power, constant capital, "c," and the direct labor power, variable capital "v." He says that the value of a commodity is the sum of these two types of labor input, that value has no source other than labor. So how does $Z = c + v$ become $Z = c + v + s$? Clearly either c or v (or both) must decompose to provide a surplus. Let's first examine "c."

If constant capital is to produce a surplus it must be capable of expanding or bearing fruit, like a tree. However long you let parafin "ripen," however cleverly you provide it with other parafins to mate, it will not turn into a candle without the direct involvement of human labor. Nor, since parafin is it-

self a commodity, is it possible to buy parafin at less than the value embodied therein. We must therefore look further to find the source of the capitalists' income. This profit source is in the dual nature of the commodity, labor, that is, in the unity of opposites embodied in the work process.

Consider the capitalist: prevented by competition from padding the price, forced by competition to pay full value for labor, material and equipment. Where can he cut corners to earn a profit? The answer is that he pays each worker for only a part of the labor time expended. The value of a unit of labor time is the amount of labor time required to produce that unit. That is, consumption of a certain amount of food, clothing, shelter, etc., is a necessary condition for the worker to spend his time producing. Some of these commodities will be biologically "necessary" and others will be only socially "necessary." Even this dividing line is not very carefully drawn since the type of housing or clothing or food items in the laborers diet depends very much on the society in which he lives. Necessary consumption cannot be defined unhistorically.

Let's say that this bundle of commodities has a value equivalent of 4 hours (\$8). Then the value of 1 day's labor is \$8 and this the capitalist will pay. BUT, he will require more than 4 hours labor, let's say, 8 hours. Then the value of the commodities one worker produces will be,

$$Z = c + 4 \text{ hrs.} + 4 \text{ hrs.}$$

If hours are represented by \$2, if c is equal to 8 hours and if 1 day's candle output is 100 candles the exchange value of each will be; $(100 Z = \$16 + \$8 + \$8 = \$32)$ $Z = 32\text{¢}$. Each candle will sell for 32¢, which is its true value. 16¢ will pay for material and machinery, 8¢ for wages and 8¢ is profit or equi-

valently, surplus value.

By hiring the worker to work more hours than it takes to produce the value of his wage, the capitalist expropriates surplus value. His raison d'etre is expanding this surplus. It is not the fact of exploitation which is unique to capitalism but the form which it takes, i.e., creation of surplus value.

LECTURE THREE:

THE SYSTEM IN MOTION: ACCUMULATION

Last time I talked about the simple Marxist model. This consisted primarily of defining terms, like capitalist, value, surplus value and so on, which represent economic categories, and then explaining some of the relationships between those categories. We stayed very much within the realm of theory, and within that realm we concentrated on a very specific type of theory, a static theory, where we describe a capitalist world without change, one which continually reproduces itself, but is not dynamic, is neither growing, shrinking nor changing. Today we will focus on the system in motion, talking both about the causes of change and some of its results. We are still going to be talking about theory. I hope that none of you expect me (or Marx) to provide a general statement about reality which directly encompasses every one of your experiences. The function of a good theory is to give you a broad framework for understanding things, not a detailed guide to everything you may run across.

I have especially in mind those who say that Marx's prediction of an increasingly miserable working force has been disproved by the increasing affluence, shorter hours and improving work conditions of the American worker. Please keep that interpretation of Marx in the back of your mind while we proceed.

The first step in making the model a dynamic one is to define two important concepts.

Absolute v. Relative Surplus Value

We have seen that the working day can be decom-

posed into two sections, called by Marx, "v" and "s," meaning the paid and the unpaid portions respectively. The capitalist has in mind increasing the size of "s." There are many ways he may do this. First of all if it takes 4 hours to produce value equivalent to the worker's wage and the work day is eight hours, so that each worker produces a surplus value of 4, it is easy to add to the capitalist's stock of surplus value by hiring more workers. This means that a tendency exists in capitalism to have everyone working, i.e., to expand the work force.

A second way to expand "s" is to lengthen the working day. Each hour added to the working day is an hour added to surplus. Marx called this an increase of "absolute" surplus value.

A third way to expand "s" is to shorten the time required to produce the value equivalent of the worker's wage. The main way in which this comes about is by increasing the "productivity of labor." This can mean the introduction of machinery, better training, a highly educated labor force, etc. Before we proceed, let's just look at a numerical example to make sure we understand the difference.

- 1) work day = $v + s = 4 + 8 = 12$
- 2) abs. s. v. \Rightarrow work day = $4 + 10 = 14$
- 3) rel. s. v. \Rightarrow work day = $3 + 8 = 11$
- 4) both \Rightarrow work day = $3 + 9 = 12$

$$s' = (\text{the rate of surplus value}) = \frac{s}{v} \text{ or the rate of exploitation in}$$

$$1) = \frac{8}{4} = 200\%$$

$$2) = \frac{10}{4} = 250\%$$

$$3) = \frac{8}{3} = 266\%$$

$$4) = \frac{9}{3} = 300\%$$

Notice that while increasing absolute surplus value (case 2) implies working longer and longer hours, increasing relative surplus value (case 3) implies a shorter working day. The capitalist of course is only interested in increasing surplus value itself, regardless of its source, so which of these opposing tendencies dominates will be settled by the objective characteristics of the mode by which they are expanded.

Expansion of absolute surplus value is limited by the clock and by family size. Family size is important because while the limit of one man's ability to work is, say, 14 hours, nothing prevents the capitalist from hiring wife and children, at lower wages. Thus, if a family consists of 3 people working 14 hours apiece, if their wages are 4, 2, & 2, total surplus value is 34 hours. If the family consists of 5 workers while nothing else changes total surplus value is 58 hours. Try thinking about the population explosion in those terms for awhile. Those of you concerned with the roots of "population explosion" would do well to read Marx's commentary on Malthus in Chapter 25.

Expanding relative surplus value means lowering the costs of producing and reproducing workers. The easiest way of doing this is to mechanize the production processes for wage goods. A textile factory embodies little labor in the clothing produced relative to hand production. Large-scale factory production not only lowers the cost of producing wage goods, it also lowers the quantity of labor embodied in the capital goods used.



Capitalist systems have a built-in reason to adopt machine production very rapidly. Marx has this to say about machines:

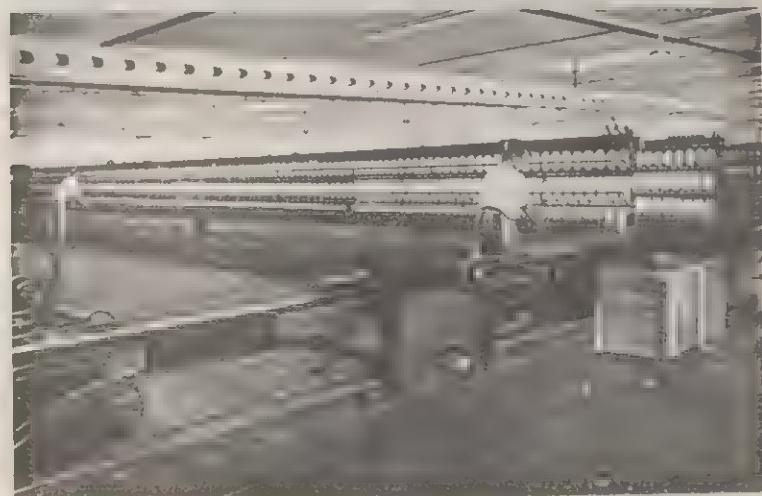
Like every other increase in the productiveness of labor, machinery is intended to cheapen commodities, and, by shortening that portion of the working-day, in which the laborer works for himself, to lengthen the other portion that he gives, without an equivalent to the capitalist, in short, it is a means for producing surplus-value.

I want to advance a sort of "stages of growth" theory that in initial stages of capitalist accumulation there will be rapid expansion of both the number of workers and the length of the working day. That is, the extension of absolute surplus value will dominate the first stage.

The second stage will be characterized by the

widespread adoption of advanced technologies and universal education which advances at the same rate as technical change, since a high degree of skill and education is required to operate these machines.

As mechanization advances, the level of schooling and the productivity of the typical worker also increases. Capitalists will make the discovery that there is an optimum length of the working day. Taylorism, time and motion studies, assembly lines, multiple shifts and shorter hours all result from the expansion of relative surplus value. Notice that these result not from the humanitarian feelings of Rockefeller, Ford and Carnegie, but from their enlightened self-interest. The other force at work in this stage will be the self-movement of the masses against their conditions. This will result in laws limiting the hours of work, especially of women and children, and demands for education and for immigration controls. These political goals of the workers will be quickly met, since the self-interest of the



most advanced capitalists lie in the direction of rapid expansion of relative surplus value which requires, above all a skilled work force.

Another important way in which relative surplus value can be expanded is through foreign trade. If the "necessities of life" (Marx's term) such as food and clothing can be gotten cheaper abroad than at home there will be no shortage of capitalists who realize that this gives them an opportunity to expand surplus value. Let's try another example with three hypothetical outcomes:



without trade W.D. = $v + s = 4 + 4 = 8$ $s' = 100\%$
with trade 1) W.D. = $v + s = 2 + 6 = 8$ $s' = 300\%$

" " 2) W.D. = $v + s = 2 + 4 = 6$ $s' = 200\%$

" " 3) W.D. = $v + s = 2 + 5 = 7$ $s' = 250\%$

In case 1) the capitalists seize all the benefit of trade. In case 2) the workers do, and in case 3) the workers' and capitalists' struggle over the wage rate has produced a sort of sharing of the benefits of trade, specifically shorter hours and higher pay for the best worker and higher profits for the

capitalist. It is this latter case which describes past U. S. experience. Keep in mind, however, the possibility of the other outcomes.

This enables us to cast some light on a phenomena that has been much discussed by development economists. The so-called "Myrdal-Singer-Prebisch" thesis has to do with the fact that the "terms-of-trade" have turned and are continuing to turn against third world countries. For instance the price index of agricultural products declined from 100 in 1948 to 91 in 1963 while the index for manufactured goods rose from 100 to 105. Thus, at the end of one 15 year period a given quantity of agricultural products purchased 15% less in finished products than it would have at the start. This process has continued for over 100 years.

Perhaps the facts about one crop economies are well enough known to you that I needn't go into this in depth at all. Developing countries (U. N. classifications and data) account for 41% of the exports of primary commodities and 6% of the manufactured. Fifty-one percent of Brazil's exports is coffee. Rubber is 54% of Malaya's; rice, 67% of Burma's; tea, 66% of Ceylon's; oil, 92% of Venezuela's; and sugar is 99% of Mauritius'. From 1953 to 1961 the volume of Brazilian coffee sold in the world market place rose 9% while the revenue from those sales fell over 35%.

Since the drive to accumulate is limitless, however, the advent of the third stage will be marked by resumption of efforts to expand both absolute and relative surplus value. I don't want to go into this very deeply, but let me just mention two important facts. The number of working women has risen fairly continuously until now, more than 40% of all women are in the labor force at any given time. I have been told that one of the things holding up Nixon's welfare plan is the question of how to get women on welfare working. Secondly, I have here a clipping from a



recent Wall Street Journal, which talks about the extent of child labor in the U. S. and says that it rose 15% in fiscal '70. The headlines read "More Companies Turn to Illegal Child Labor in Cost-Cutting Drive." "Kids of 7 Get Sweat-Box Jobs, Rail Accident Kills Boy of 14, But Few Firms Are Punished."

We should remember here that the Law of Uneven Development tells us that parts of the economy will still be in Stage One while other parts are in Stage Two and that consequently the effects we just discussed will exist side by side.

We should also ask whether the various ways of expanding relative surplus value are not in the nature of temporary expedients. Is it possible to go on reducing v , forever? Clearly it can't go below zero - but can it approach zero indefinitely? I think that few will deny that we still have a very long way to go with automation, but it seems that the third world revolutions, if successful, will close off foreign

trade as a source of further reductions. Another force operating in the same direction is the revival of Japan and Western Europe as their entry into world markets pushes down the price of manufactured goods and raises wages. The net effect is still problematical, but it is significant that two new words have entered this country's economic jargon, "stagflation" and "Nixonomics."

While machine production is the main source of expanding relative surplus value, there are other ways. "Speed-up," for instance, will shorten the time required to produce the value of a day's labor power. Using Sweezy's example: if in a 10 hour day, the first 5 go to produce the value of wage goods and the next 5 are surplus labor; if by coercion, harassment, bonuses or simply running the machines faster a worker



can produce in 4 hours what he did before in five, the rate of exploitation will have gone from 100% to 150%, a rather sizeable shift.

The Accumulation of Capital

All of the ways of increasing surplus value that we have looked at so far, have in common that they require the capitalist to employ progressively more and more machinery. We have been examining the way in which surplus-value is created from capital. Now it's time to follow the process to the next step - the creation of capital from surplus-value. This part of the process Marx calls accumulation of capital.

Let's return to our value relation:

$$Z = c + v + s$$

if our capitalist advances \$10,000 on constant and \$10,000 on variable capital, receiving back \$25,000, he has a surplus of \$5,000.

Accumulation here means that the capitalist who began the process M-C-M' with \$20,000 and leaves it with \$25,000, re-enters with \$25,000 into a new process, M'-C-M''. If conditions don't change he will receive the same profit rate of 25%, so adding \$6,250 to his capital. It is the nature of things to change, however.

The machines bought by our capitalist may be of two separate types. They may be identical to the ones already in service, in which case demand for labor advances at about the same pace as accumulation. This increases the price, or wage. Marx felt that when this happened with other commodities the increase in demand, driving market price above value, would soon be met by an increase in supply, sufficient to re-equilibrate price and value. In the case of labor, however, in a

non-slave economy, there is no capitalist or group of capitalists who can begin a more rapid production of laborers.

Without this feature of a capitalist market, how can our capitalist keep the rising demand for labor from raising wages above the value of labor power? On the capitalist's ability to do so his profits (and the whole system) depend.

The answer lies in the second type of new machinery, mentioned earlier, that which is not identical to that already employed. If the machinery is labor-saving then the capitalist will be able to get along with fewer workers. This reduction in the demand for labor will depress the wage. Whether this effect or the increased demand for labor and thus increased wages will predominate is something that depends on the relative mix of labor-saving and capital-saving machinery. Relative market prices of capital goods and labor can be such that in any given situation it is cheaper to produce with more labor. The alternative results, then, are higher wages (case 1) and a reserve army of unemployed (case 2). That both results exist side by side should surprise no one who has learned to think of social relations as unities of opposites.

Original Accumulation, Concentration and Centralization

Now let's try to place this production process in a historical perspective. We have seen that capital produces surplus value which turns into more capital to produce more surplus value, etc. How did this process begin, and where does it lead? Prior to the rise of the industrial system, capital was accumulated in a variety of ways. Moneylending, commerce, including foreign trade and plunder, theft of common property as the feudal system drew to a close, among others.

In the U. S. perhaps the most important source of original accumulation was the slave trade and slave system itself. Thousands of millions of hours of unpaid labor went into the process of laying the industrial foundations of the land of opportunity.

As the process continues two things will occur, concentration and centralization. Concentration means simply that more and more capital will be available per worker in the production process. Centralization means that it (the capital) will be controlled by fewer and fewer people. Concentration creates more and more capitalists as it creates more and more capital. Centralization eliminates capitalists, "one capital kills many."

The effects of concentration will dominate in the boom phase of the business cycle, but individual firms will have a high mortality rate in the bust phase as the tendency toward centralization dominates. Marx gave as the limit to this process, all capital in a country in a single hand. In that light it is perhaps significant that by 1970 the 100 largest non-financial corporations produced the same fraction of total output as had the 200 largest in 1953.

LECTURE 4: WAGES & WORKERS

According to our analysis so far, workers in capitalist countries may expect shorter hours and higher wages, as a direct result of accumulation, at least through a considerable time period. What, then, of the well known doctrine of increasing immiseration of workers? Let's see what Marx said about this.

In "Wage-Labour and Capital" he wrote:

A notable advance in the amount paid as wages presupposes a rapid increase of productive capital. The rapid increase of productive capital calls forth just as rapid an increase in wealth, luxury, social wants, and social comforts. Therefore, although the comforts of the laborer have risen, the social satisfaction which they give has fallen in comparison with these augmented comforts of the capitalist, which are unattainable for the laborer, and in comparison with the scale of general development society has reached. Our wants and their satisfaction have their origin in society; we therefore measure them in their relation to society, and not in relation to the objects which satisfy them. Since their nature is social, it is therefore relative.

Then, in the remarkable Chapter 25 of Volume I, the one chapter which everyone should read, he said:

All means for the development of production transform themselves into means of domination over, and exploitation of, the producers;

they mutilate the labourer into a fragment of a man, degrade him to the level of an appendage of a machine, destroy every remnant of charm in his work and turn it into a hated toil; they estrange from him the intellectual potentialities of the labour-process in the same proportion as science is incorporated in it as an independent power; they distort the conditions under which he works, subject him during the labour-process to a despotism the more hateful for its meanness; they transform his life-time into working-time, and drag his wife and child beneath the wheels of the Juggernaut of capital. It follows therefore that in proportion as capital accumulates, the lot of the labourer, be his payment high or low, must grow worse. (my emphasis)

For a seer of such "doubtful" accuracy I must say that those sentences could have been inserted into almost any issue of Look, Fortune, Business Week, or Time, among others, as part of an article on "What Ails America?", and gone unnoticed. It is clear to those who have cars and can hear that the concept of immiseration, had very little to do with increasing poverty. Marx was not unaware of the existence of the word poverty - had that been what he meant that is what he would have said.

Whatever the long range effects on wage, employment and profit levels may be, we should not be at all surprised to learn that for short time-periods first one force and then another dominates. This is the most plausible explanation of the economic crises which periodically devastate a capitalist production system. Section three of Sweezy's remarkable book, Theory of Capitalist Development, which I find better each time I turn to it, has a fairly complete classification scheme for various theories of the business

cycle. You should definitely read it. He reports fairly and accurately the debate which has raged over what causes crises. Each theory has attracted various proponents, probably because each represents an element of truth. The truth is that crises are caused by the dialectical interaction of a large number of opposing forces - this means that different crises may have different causes, that is different propelling forces.

With this warning, I want to skip right over things like under consumption, internal contradictions, monetary manipulations, overproduction, both absolute and relative, and other forces which may contribute to the development of any particular crisis and instead concentrate on the problem of surplus realization. I find this concept extremely useful, not only to help explain crises, but to cast light on the whole process of accumulation, and phenomena like imperialism, the war in Asia, the Great Society and its Nixon extensions, and a whole host of other phenomena.

An example may help clarify this concept. Let us say that our capitalist has produced and kept in inventory 10,000 gidgets each of which has a total value of \$20, broken down as $c = \$10$, $v = \$6$, and $s = \$4$. This means that our capitalist has laid out \$160,000 to produce \$40,000 of surplus value, which has yet to be realized, that is, converted to money. While these 10,000 gidgets are being kept in inventory any number of things may occur to prevent their conversion. These things constitute the surplus realization problem.

First of all, demand may fall either because tastes change or because income falls, or because someone introduces a substitute. In each of these cases the price of gidgets must be lowered, say to

\$18. Since the capitalist has already paid for wages and materials, his profits "fall" to \$2 per gidget - he has "lost" a total of \$20,000. This "loss" remains a "paper" loss only so long as the price does not fall below \$16. At that figure he breaks even, at lower prices he fails to recover his original outlay. It is a matter of indifference whether this surplus is not realized because price falls or because some gidgets go unsold. The first is the competitive result, the second the monopolistic result.

A second type of realization problem comes about because of reductions in the cost of production of gidgets. If after our capitalist has produced the gidgets, but before he has sold them, a new process in which v equals only \$2, is introduced and adopted by other gidget producers the price of gidgets will fall to \$16. This is because the extra \$4 worth of labor time put in by the employees of our capitalist is wasted, is not necessary labor time.

Faced with this dilemma, our capitalist has little choice. He may go on producing with his old technique or he may adopt the new process. In the first case he earns no profit, in the second his profit is \$4 per gidget, or 25%. Thus competitive capitalists are forced either to adopt the newest technologies or accept bankruptcy. Moreover, there exists the possibility of earning super profits during the time that other capitalists switch production set-ups if he is among the first with a cost-lowering device. This possibility arises because he may set the price (temporarily) above value, say at \$19. Profit per gidget is \$7 or 37%.

Just as the concept of surplus realization helps explain why competitive capitalism compels rapid economic growth by ensuring the development and in-

stallation of the newest machinery as soon as it is introduced, it also helps explain why capitalists employ advertising (to prevent disastrous shifts in tastes) and why capitalist governments engage in larger and larger spending programs (to keep demand up).

When Paul Sweezy was here he mentioned that he is a stagnationist and that that caused him to be even less acceptable to economists than does the fact that he is a Marxist. As a Marxist, they can deal with him, but as a Marxist who believes in stagnation they can't handle him. We'd better check into this.

Thirty years ago, lots of really respectable economists were stagnationists. They developed the theory at a much more intricate level than we are going to do, for all we need are the bare essentials. The main idea is that aggregate wages are too low to allow the realization of all the surplus value that has been produced. Since investment opportunities become scarcer and scarcer as accumulation proceeds,



actual production lags behind potential production, and a fairly large portion of productive capacity, including workers, lies unused. Furthermore, this tendency toward stagnation grows stronger and stronger as time passes.

Can we find any evidence to support such a thesis? Of course. I'm not going to pretend to be comprehensive in marshalling the data, and the presentation will not be in order of importance. First, this table shows pre-tax income through the first half of this century. It shows that the market mechanism is doing a worse and worse job of distributing income. The 3 lowest groups received 13.8% in 1910 and only 8.6% in 1959. This means that the state has to spend more and more on redistributive programs just to keep demand up. Just like Alice, we have to run as fast as we can just to stay where we are. Recent increases in welfare cases emphasizes this point. The number of recipients has risen from 8.4 in 1968, to over 13 million in 1971.



Second, Paul Sweezy has marshalled data which show that if the federal government had allowed post war military spending to return to its 1933 level, the unemployment rate would have returned to its 1933 level of 25%.

Next, LBJ inaugurated a host of programs of state spending on social services under the rubric, "The Great Society." RMN has taken over most of these, added some of his own, such as the Family Assistance Plan. Moreover, the powerful Committee on Economic Development recently issued a call for an increase of \$50 billion annual spending on social services. This is new spending, over and above current program levels. Military spending has continued to rise, and will do so for some time. In 1960 Kennedy was elected, in part, because of a "missile gap," the closing of which raised the defense budget by \$7 billion, or 16%. When that proved inadequate, LBJ invented the Tonkin Gulf incident, in which Vietnamese in a rowboat attacked the U. S. navy, to further expand military spending. Nixon's "Vietnamization" program is maintaining the rise. The navy is claiming its own "missile gap," the closing of which will require billions more.

Despite all of this activity, the level of aggregate demand has become increasingly unable to maintain an "acceptable" level of unemployment. Despite all future efforts it will continue to be inadequate. For the problem is not on the demand side, it lies in the increasingly critical foreign trade sector, where traditional channels of creating relative surplus value are being blocked off by the twin assaults of capitalist competition and nationalist reactions; and where the low-cost, high productivity of European and Asian capital is preventing the realization of much of the surplus being produced. That all of this foreshadows a renewal of the attack on the American working class is beyond question. The only difficult question involves timing.